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ABSTRACT

The impact of changes in the special education environment on the role of the resource teacher are discussed, such as trends toward placing students with special needs within regular classrooms, delivering programs to learners with a wider range of instructional needs, and collaborating in delivery of classroom instruction. Consequent shifts in demands upon teacher educators are then noted. The Department for the Education of Exceptional Children of the University of Saskatchewan's College of Education in Saskatoon, Canada, responded to these changes by: moving resource teacher preparation courses from the undergraduate to graduate level; developing generic theory courses around a core of "integrated practicum" classes; involving local public schools as practicum sites; and making use of peer coaching, reflective journal writing, and role playing and modeling. One component of the change process involved integrating computer technology into teacher preparation, through development of Project AIMS (Assessment, Instruction, and Management Support). The AIMS CoPlanner is an interactive computer program designed to help teachers gather relevant information about a student, reflect on that information, plan teaching strategies, monitor student progress, and report on student progress. Besides supporting instruction, AIMS CoPlanner was designed to enhance communication among staff who share responsibility for the education of a student, to make assessment and teaching tools available online, and to reduce administrative time involved. (Contains 15 references.) (JDD)

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# AIMS CoPlanner: Transacting changes in resource teacher preparation

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**AIMS CoPlanner: Transacting changes in resource teacher preparation**

The Nature and Context of Change

The past decade has been a time of accelerating educational change. While personnel in the field of education in general have been struggling with paradigm shifts associated with the nature of curriculum, instruction, and assessment, special education has undergone its own journey through change. The central practices around which these changes revolve have included the equity movement, the Regular Education Initiative, and inclusionary approaches (Skrtic, 1991; Stainback & Stainback, 1984). As a philosophical principle, the mainstreaming of exceptional children has been encouraged, if not mandated, in special education legislation. In practice, there has been a progressive trend toward placing students with special needs within regular classrooms rather than labelling and segregating them from peers for their education (Sanche & Dahl, 1991). These changes in the special education environment are nowhere greater than in the emerging role of the resource teacher. Faculties of Education are challenged to design preservice preparation programs that reflect the new collaborative role of the resource teacher.

As the student populations in classrooms become more diverse, there is a greater need for the classroom teacher to become involved in planning and delivering programs to learners with a range of instructional needs. The design of effective adaptive programming now becomes the shared responsibility of teams of professionals (Friend & Cook, 1992; Idol, Paolucci-Whitcomb, & Nevin, 1986). Consultation and collaboration have emerged as the new instructional practice paradigm for special educators. The shift has meant a major change in the way that resource teachers and other support personnel work (Villa, Thousand, Paolucci-Whitcomb, & Nevin, 1990). Specialized skills and knowledge are now more frequently delivered either indirectly or through integrative instructional approaches (e.g., co-teaching, peer coaching). This has placed new demands upon special educators to acquire the requisite interpersonal skills to communicate effectively, to plan instruction jointly, and to collaborate in various aspects of the delivery of this instruction within the classroom.

As the repertoire of professional skills required of special educators has changed, the demands upon teacher educators have shifted accordingly. The challenge is to provide graduates not only with the technical skills and knowledge within the discipline of special education, but also to prepare these teachers with the array of inter-personal skills needed for them function effectively within

collaborative teaching contexts (Swan & Sirvis, 1992). Like many other special education departments, ours at the University of Saskatchewan have embarked on a new model of resource teacher preparation designed to prepare teachers to work collaboratively.

Changing and Initiating Change

For over 20 years our resource teacher preparation program had operated on a clinical diagnosis - prescriptive teaching model. We began the change process in 1989 by developing a vision of what our new program should look like. We surveyed the literature and conducted a needs assessment through face-to-face meetings and mail-in surveys of our graduates and other professionals. The central suggestions for change were to prepare resource teachers to work collaboratively, to support teachers and exceptional learners in classrooms, and to use computer technology in their work. Rather than attempting to implement such large scale change in an incremental fashion, we decided as a faculty that the organizational structure of our program would first need to be revamped to facilitate philosophy, content, and procedural changes. We moved our resource teacher preparation courses from the undergraduate to graduate level. Next we developed a series of generic theory courses (academic/cognitive, social/behavioral, language, and transition needs) around a core of "Integrated Practicum" classes.

A good deal of liaison work with the local public school system was required to communicate to school officials the goals of our new program and to prepare a joint plan for the involvement of schools as practicum sites. We jointly selected schools where active collaboration and in-class support service approaches were being practiced by the staff. The practicum plan developed jointly with the schools involves resource teachers in training beginning practicum work near the end of October and spending an average of one day per week in the schools until April. Students work in teams of two to facilitate reflective practice through co-teaching, peer coaching, and joint planning between team members.

The central themes in our course preparation are collaboration (Friend & Cook, 1992), reflective practice (Schon, 1990), integrated curriculum (Perkins, 1991), authentic assessment (Perrone, 1991), and inclusion and adaptive education (Stainback & Stainback, 1990). To develop these themes in preparation for and during practicum experiences, we make extensive use of peer coaching (Peterson & Hudson, 1989), reflective journal writing (Surbeck, Han, & Moyer, 1991), and

role playing and modeling (Englert, Tarrant, & Mariage, 1992).

Computer Software to Facilitate Change

An important component of our change process has been the integration of computer technology into the preparation of resource teachers. We wanted to build the orientation and use of computers into the new course structure rather than to create a separate class about computers (Budin, 1991). We also wanted to use computer technology to reinforce and support our course themes, to serve as a bridge between theory and practice on campus, and to facilitate the transition from campus-based instruction to the field-based practicum. We initiated Project AIMS (Assessment, Instruction, and Management Support) for the purpose of creating a computer program that would accomplish the ambitious goals that we had for the inclusion of technology in our teacher preparation framework.

An extended description of the resulting program, AIMS CoPlanner, is provided in the Appendix. The software is being used this year for the first time in four elementary schools as part of our new resource teacher preparation program. We have also established a variety of other field test sites. The heart of the program consists of a database which appears as a two-dimensional CoPlanning Worksheet containing active text fields. The rows consist of curriculum areas, while the columns are comprised of a series of guiding questions nested under a planning model with the following components: Information Gathering, Reflection, Teaching, and Monitoring. To begin the process, a file is created by a team of collaborating educators for a learner who requires their support. The software prompts the team to define the concerns, envision outcomes, and summarize related information about the learner. Next, a Project (a focussed sequence of planning and instruction directed at the identified concerns) is initiated by the team for the learner. The software prompts users to compile an accumulating summary of the Project as they work through the model together. The Reporting Worksheet assists team members in planning the reporting process, and draws on the Project Summary to generate printed reports. To support these central activities there is a Communication system, consisting of internal mail between users, personal notes, and an online Thesaurus. The Tools module allows assessment and teaching devices to be coded on-line and searched based on tool properties and/or curriculum area. Finally, a Security system provides password protection for confidential information, and a User Help system supports users through context-sensitive balloon helps and an on-line manual.

We are using CoPlanner as an essential part of our Integrated Practicum courses this year.

Prior to the start of their school practica, weekly laboratory sessions orient the students to the use of Macintosh computers. As theory and research are introduced around the topic of Identification, the teams work with CoPlanner to initiate a sample student file for practice. The course content progresses through the theory, research, decision making, and problem solving associated with Information Gathering, Reflection, Teaching, Monitoring, and Reporting. The graduate student teams work with CoPlanner on an ongoing basis, progressively developing the sample cases. In the process they learn how to use computers and how to use CoPlanner to support collaborative decision making. One of their assignments is to research and prepare collections of assessment tools, then enter these into CoPlanner. By assigning different teams to discrete topic areas, a fairly comprehensive collection of tools can be shared by the teams in their practicum work.

Each of the graduate student teams is provided with a computer system which accompanies them to the schools and remains there for the duration of their practica. Here they use CoPlanner in much the same way as they had during the practice cases in the campus computer laboratory. The difference is that the case is real, and the classroom teachers and/or the school resource teacher become partners in the Projects. In this way, CoPlanner serves as a bridge between theory and practice within courses on campus. It also facilitates the transition between campus-based instruction and integrated practicum experience by providing an organizational framework within which school-based collaboration can proceed.

## Conclusion

Major changes in conceptualization of the nature and delivery of services to special needs children have been accompanied by concurrent changes in the way Colleges of Education prepare special education teachers. This session described how the faculty at the University of Saskatchewan have designed and implemented a field experience-based, collaborative model of resource teacher preparation. AIMS CoPlanner, a computer program developed for these courses, has been an important contributer as we have transacted these program changes. The software has served as an effective teaching tool by successfully preparing our graduate students for integrated practica, and by supporting their work in partner schools. We believe that the software will also continue to serve as an instrument of change and growth as our graduates progress in their professional careers.

## References

Budin, H. R. (1991). Technology and the teacher's role. *Computers in the Schools, 8,* 15-26.

Englert, C., Tarrant, K., & Mariage, T. (1992). Defining and redefining instructional practice in special education: Perspectives on good teaching. *Teacher Education and Special Education, 15,* 62-86.

Friend, M. & Cook, L. (1992). *Interactions: Collaboration skills for school professionals.* New York: Longman.

Idol, L., Paolucci-Whitcomb, P. & Nevin, A. (1986). *Collaborative consultation.* Austin, TX: Pro-ed.

Perkins, D. N. (1991). Educating for insight. *Educational Leadership, 49,* 4-8.

Perrone, V., ( Ed.). (1991). *Expanding Student Assessment.* Alexandria: Association for Supervision and Curriculum Development.

Peterson, S., & Hudson, P. (1989). Coaching: A strategy to enhance preservice teacher behaviors. *Teacher Education and Special Education, 12,* 56-60.

Sanche, R., & Dahl, H. (1991). Progress in Saskatchewan toward integration of students with disabilities. *Canadian Journal of Special Education, 7,* 16-31.

Schon, D. (1990). *Educating the reflective practitioner.* San Francisco: Jossey-Bass.

Skrtic, T.M. (1991). *Behind special education: /. critical analysis of professional culture and school organization.* Denver: Love.

Stainback, W. & Stainback, S. (1990). *Support networks for inclusive schooling: Interdependent integrated education.* Baltimore: Paul H. Brookes.

Stainback, W. & Stainback, S. (1984). A rationale for the merger of special and regular education. *Exceptional Children, 51,* 102-111.

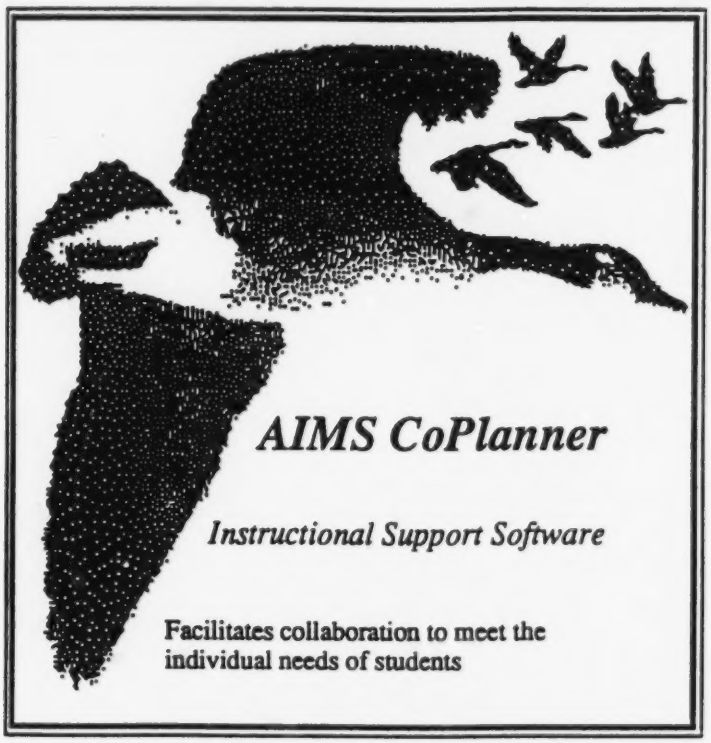
Surbeck, E., Han, E., & Moyer, J. (1991). Assessing reflective responses in journals. *Educational Leadership, 48,* 25-27.

Swan, W., & Sirvis, B. (1992). The CEC common core of knowledge and skills essential for all beginning special education teachers. *Teaching Exceptional Children, 25,* 16-20.

Villa, R. A., Thousand, J. S., Paolucci-Whitcomb, P. and Nevin, A. (1990). In search of new paradigms for collaborative consultation. *Journal of Educational and Psychological Consultation, 1,* 279 - 292.

ATTACHMENT

# HIGHLIGHTS OF AIMS CoPlanner




AIMS CoPlanner is an interactive computer program designed to support the shared responsibilities of teachers and other educators working with students with special needs. The program facilitates communication, decision-making, and instructional planning among collaborating educators. Use of AIMS CoPlanner helps teachers to be systematic and thoughtful as they gather relevant information about a student, reflect on that information, plan teaching strategies, monitor student progress, and report on the progress of individual children and youth.

The Canada goose has been chosen as the symbol for CoPlanner because, in flight, a flock of Canada geese manifests many of the attitudes and behaviors essential in productive, cooperative teaching relationships. Migrating geese, flying in their characteristic v formation, share leadership, honk encouragement to their leaders, and support the other members of the flock in the slipstream. A pair of geese will always fall out of formation to accompany a sick or wounded bird to the ground. Above all, geese show great concern for the most vulnerable in the flock.

## Purposes of AIMS CoPlanner

AIMS CoPlanner was developed to place computer technology at the service of teachers and instructional support staff, while leaving them in control of educational decision-making. The program is intended to support teachers' decision-making, capture the results of collaborative planning and teaching, and make student records readily available to those who need them to facilitate teaching. Besides supporting instruction, CoPlanner was designed to enhance communication among staff who share responsibility for the education of a student; to make assessment and teaching tools available on-line; to shorten the process and time needed for reporting student progress, and to reduce the work involved in keeping accurate, ongoing records for students with individual education needs.

While AIMS CoPlanner was initially developed to facilitate the preservice preparation of resource teachers, it will also be equally valuable for use by experienced resource teachers, special education consultants, educational psychologists, speech therapists, social workers, medical practitioners and any other consulting or support staff working collaboratively with teachers.

As an "open" or modifiable software support system, CoPlanner can be adapted for use with any provincial or state curriculum. Also, because CoPlanner is an open system, it has potential use in other educational tasks such as for self-directed learning for adults; for collaborative supervision of preservice teachers in field practica; for transitional program planning; for collaboration among school personnel, community agencies, parents and young adults making the transition from school to work or post-secondary education, and for home-school planning for students with special needs.

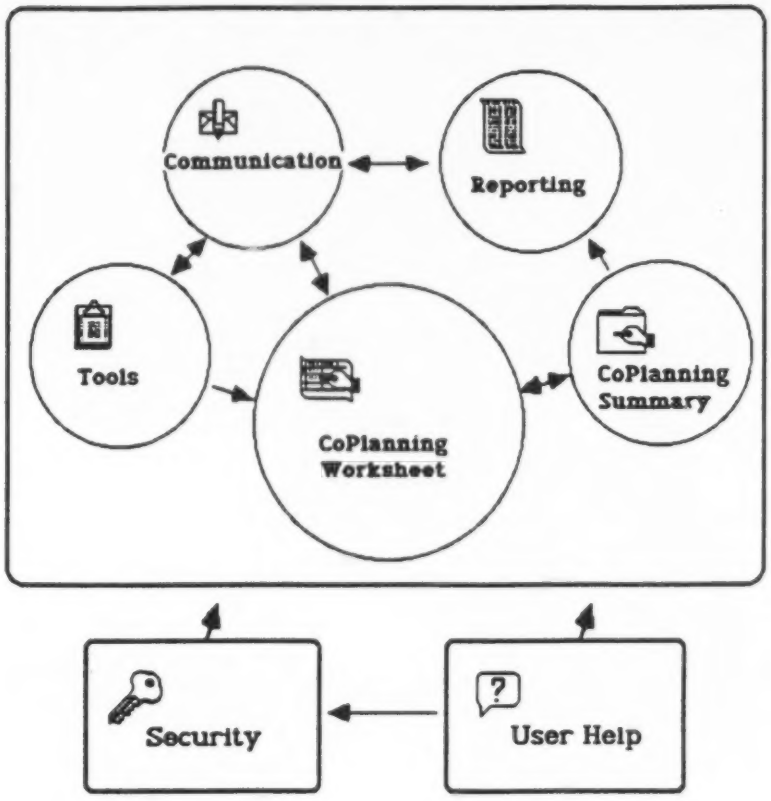
## Using AIMS CoPlanner

AIMS CoPlanner has a number of features which make it convenient and easy for teachers to utilize. The first time a teacher uses CoPlanner, a personal password is entered to maintain the confidentiality of personal notes and work in progress. Built-in "balloon helps" and an on-line manual provide tutorial assistance at the exact times and places that the user needs them in the software. At the heart of AIMS CoPlanner is a "Project"or individual profile initiated for a student with special needs by a team of collaborating users. Only Project team members have access to the CoPlanning Worksheet. Through the project, each member of the team may contribute to assessing planning for, and teaching the student. Each person may retain private notes, send mail messages to any or all of the others collaborating on the project, and use any of the on-line tools. The Report Worksheet aids the Team in planning for reporting, and the Report Generator converts Project Summaries into written reports.

Preservice resource teachers will use all of the features of AIMS CoPlanner as the bases for learning about the roles and functions of resource teachers. Fully experienced resource teachers (or other helping staff) will employ CoPlanner as an instructional support, using the tools and software features they require for their work.

## Components of AIMS CoPlanner

AIMS CoPlanner has a number of features specifically designed to support interactions among teachers and to support personnel working with a particular student. These features are illustrated and described below:




- **CoPlanning Worksheet:** A scrollable window configured according to curriculum areas, and an instructional planning model contains space for on-going planning notes.
- **CoPlanning Summary:** Student biographical information and worksheet summaries can be converted into printed reports.
- **Reporting:** The Report Worksheet facilitates report planning; the Report Generator converts CoPlanning Summaries into printable reports.
- **Communication:** Users exchange Mail, retain Private Notes, and check vocabulary with the online Thesaurus.
- **Tools:** A database for Information Gathering and Teaching tools can be searched by tool properties and/or curriculum areas. Tool reports can be printed.
- **Security:** A Password System limits access to CoPlanning Worksheets, Mail, and Notes.
- **User Help:** "Balloon Helps", an online manual, and a printed manual provide user support.

## History and Current Status of AIMS CoPlanner

AIMS CoPlanner was developed in the Department for the Education of Exceptional Children, University of Saskatchewan, by a working group consisting of the following:

Leonard Haines, Associate Professor and Project Leader
Robert Sanche, Professor and project member
Gladene Robertson, Associate Professor and project member
John Montbriand, Computer Programmer
Margareth Peterson, Extension teacher and project member

AIMS CoPlanner has been developed under a grant from The **Apple Canada Education Foundation.** Prior to its release by the Fall of 1993, the program will have undergone extensive formative and summative evaluation in field test sites in Canada, the United States, and Australia.

Funding to support development and field evaluation of AIMS CoPlanner was provided by the **Saskatchewan School Trustees Association**, the **Saskatchewan Teachers' Federation**, the **College of Education**, the **University of Saskatchewan** and **Saskatchewan Education.** Technical support was provided by staff of the Instructional and Research Applications Division of the **Department of Computing Services,** University of Saskatchewan. Equipment for developing and field-testing the software was provided by the **Apple Canada Education Foundation.**

## Hardware and Software Requirements

AIMS CoPlanner was designed for Macintosh computers using System 7 operating software. The computer needs a hard drive and at least 2 Mb of RAM. Adaptations have been made to allow for use with System 6 software. CoPlanner itself requires less than 350K of RAM.

## Who To Contact About AIMS CoPlanner

All correspondence and enquiries about project AIMS/AIMS CoPlanner should be directed to:

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